



Take Test: System Models

Test Information

Description

Instructions

Multiple Attempts This test allows multiple attempts.

Force Completion This test can be saved and resumed later, unless it is a timed test. Once you start a timed test, the timer continues even if you leave the test and/or the LMS.

Save All Answers

Save and Submit

QUESTION 1

10 points

Save Answer

What is an architectural model?

- ☐ a. The most explicit way in which to describe a system; it captures the hardware composition of a system in terms of the computers (and other devices, such as mobile phones) and their interconnection networks.
- ☐ b. A way of describing a system in terms of the computational and communication tasks performed by its computational elements; the computational elements being individual computers or aggregates of them supported by appropriate network interconnections.
- ☐ c. A way of providing an abstract perspective in order to examine individual aspects of a distributed system.
- ☐ d. Both a) and b).
- ☐ e. None of the above.

QUESTION 2

10 points

Save Answer

Which one of the following is most likely not true?

- ☐ a. Peers in a peer-to-peer architecture do not need to contact all other peers in the application.
- ☐ b. Servers require to listen on multiple ports in order to handle multiple clients.
- ☐ c. Thin clients can operate without a local hard disk drive.

- ☐ d. Proxy servers are used.
- ☐ e. Mobile code can not move.

Question Completion Status:

QUESTION 3

10 points

Save Answer

In terms of distributed systems, what is "Mobile Code"?

- ☐ a. A program (including both code and data) that travels from one computer to another in a network carrying out a task on someone's behalf.
- ☐ b. A code which is running on mobile devices.
- ☐ c. A program that can be transferred from one computer to another and run at the destination.
- ☐ d. All of the above, they are equivalent.
- ☐ e. None of the above.

QUESTION 4

10 points

Save Answer

Which one of the following is most likely not true concerning the synchronous system model?

- ☐ a. It assumes a bound on message transmission delay.
- ☐ b. It assumes a bound on process memory usage.
- ☐ c. It assumes a bound on local clock drift rate.
- ☐ d. It assumes a bound on the time to execute each step of a process.
- ☐ e. It assumes a bound on message size.

QUESTION 5

10 points

Save Answer

Which one of the following is most likely true concerning the asynchronous system model?

- ☐ a. Latency is not important.
- ☐ b. Acknowledgements are not considered part of the model.
- ☐ c. System calls are never blocking.
- ☐ d. Receivers can respond at any time.
- ☐ e. Messages can be resent any number of times.

QUESTION 6

10 points

Save Answer

Omission failures refer to which of the following cases:

- ☐ a. When a process transmission takes longer than the stated upper bound.
- ☐ b. When a message content is corrupted.
- ☐ c. When a process or communication channel fails to perform actions that it is supposed to

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 Question Completion Status:

- ☐ d. When nonexistent methods are invoked.
- ☐ e. When a process returns a wrong value in response to an invocation.

QUESTION 7**10 points****Save Answer**

Thin clients are characterized by:

- ☐ a. Implementing lightweight communications protocols.
- ☐ b. Typically providing rich functionality and performing most of the required processing.
- ☐ c. Being heavily dependent on a server's applications.
- ☐ d. Being standalone and not requiring a server to function.
- ☐ e. Having a high-speed interconnect with a server.

QUESTION 8**10 points****Save Answer**

Which of the following is a system where one node is always reacting on requests and other nodes only communicate with this node?

- ☐ a. An asynchronous system.
- ☐ b. A synchronous system.
- ☐ c. A client-server system.
- ☐ d. A peer-to-peer system.
- ☐ e. A distributed file system.

QUESTION 9**10 points****Save Answer**

Which of the following statements is true regarding the behavior of a client and a server in a client-server architecture?

- ☐ a. The server waits for a connection, while the client actively connects to it.
- ☐ b. The client waits for a connection, while the server actively connects to it.
- ☐ c. Both the client and the server actively connect to each other.
- ☐ d. Both the client and the server wait for a connection.
- ☐ e. None of the above.

QUESTION 10**10 points****Save Answer**

Which of the following is a characteristic of an asynchronous system?

- ☐ a. All operations will take an equal amount of time.
- ☐ b. The exact time it takes to perform an operation is known in advance.

☐ b. The exact time it takes

⚙ Question Completion Status:

☐ c. An internal clock has a

☐ d. The time to perform an operation does not have an upper bound.

☐ e. Messages might not be delivered.

Save All Answers

Save and Submit